

## TEACHING COMPUTER ANIMATION FOR RESULTS!

This session presents the teaching of computer animation from three different learning stages: foundation, undergraduate, and graduate. The focus is on demonstrating solid approaches and successful outcomes.

Success in teaching and learning computer animation depends on setting priorities, knowing what to emphasize, and deferring what can be placed on the back burner. Often, teachers and students become distracted by the technology and confuse technique with content. Students prefer to learn the latest 3D animation software tools because they believe this will compensate for any lack of artistic skills. But this isn't realistic because the computer amplifies the students' limitations.

This panel shares examples of successful student animation work from three different levels of computer animation instruction: foundation (University of Arizona), undergraduate (Ringling School of Art & Design), and graduate (California Institute of the Arts). At each stage, the challenges are different. At the foundation level, the challenge is to keep students focused on the basic principles of animation and make the work exciting. At the undergraduate level, the challenge is to keep the animation-production timeline realistic, maintain the focus on quality not quantity, and require students to rework animation as necessary. The point here should not be to impress your audience but to entertain and communicate. At the graduate level, expectations should be very high, yet students still need guidance in balancing their desire to create something completely original and the professional expectation that they will entertain the audience.

Each student embodies a different set of abilities and sensibilities. By recognizing their students' different needs at different stages, instructors do not have to sacrifice long-term goals for more immediate preferences and affinities. This strategy has the added benefit of encouraging students to consider embarking upon a computer-animation career, instead of simply practicing their skills as a hobby.

Craig Caldwell holds an undergraduate degree from Florida Southern University, a MFA from the University of Florida, and a PhD in computer graphics and animation from The Ohio State University. He worked at Walt Disney Feature Animation from 1997-99. His animations have been included in the commercial tapes "Computer Dreams," "Computer Graphics Anthology," and the "SIGGRAPH Interactive Arts and Video Artists" (Issue 40/41). His work has been published in Computer Graphics World, SISEA Proceedings, PIXIM, L'Image numérique à Paris, World Graphic Design Now, the NCGA Conference Proceedings, and IEEE Computer Graphics & Applications. His work has been exhibited at Der Prix Ars Electronica, IMAGINA, and Eurographics.

*Contact*

CRAIG CALDWELL  
Media Arts Department  
University of Arizona,  
PO Box 210076  
Tucson, Arizona 85721 USA  
+1.520.626.9073  
craig@u.arizona.edu

KEVIN GEIGER  
California Institute of the Arts

JIM McCAMPBELL  
Ringling School of Art & Design

*Jim McCampbell*

My primary responsibility is to teach upper-level computer animation undergraduates. As the lead instructor for the seniors' final animation project, I approve the work at various stages. So I have witnessed a wide range of varying success in these final projects, from the fair animations that never really take shape to projects that I thought would never succeed but are somehow rescued and projects by students for whom nothing goes wrong. The latter students are always on top of the process, and, in the end, it is really the process at which they excel.

*Kevin Geiger*

I have taught advanced topics in computer graphic animation at CalArts for more than five years. I love it, because it offers me the opportunity to stimulate and motivate the students in original directions. At the same time, I am able to put the entertainment industry in perspective because of my own professional experience. CalArts' is close to Burbank and several Hollywood studios, so the students constantly feel the influence of the industry. This is a seductive reality, but it can also foster significant anti-industry responses. It is my responsibility to channel these reactions into productive creative results. While the responses are diverse, they always challenge the students to create the best work they can.